

IN THE SPECIFICATION:

After the Title of the Invention and before line 1, insert the following new heading and paragraph:

Cross Reference to Related Application

The present application is a U.S. national stage of International Application No. PCT/JP03/03320, filed March 19, 2003, and published in a Non-English language.

Paragraph beginning at line 15 of page 13 has been amended as follows:

As shown in FIG. 1, the rotor 3 is formed substantially cylindrically and with a base, and is formed from magnetic stainless steel. An open hole 41a with the central axis A1 as its center is formed in the center of the bottom wall part 41 of the rotor 3, and is fixed to the support part 13 of the bearing part 4. A ring shaped front face 43a facing the central axis A1 direction is formed at the tip end of a cylindrical wall part 43 protruding from the periphery of the bottom wall part 41 of the rotor 3. The rotor 3 is arranged such that its front face 43a faces the inner surface ~~32b~~ 32a of the bottom wall part 32 of the base member 31. Furthermore, a permanent magnet 45 formed in a ring is fixed on the front face 43a of the cylindrical wall part 43 with an adhesive or the like.

Paragraph beginning at line 1 of page 15 has been amended as follows:

The ratio of the outer diameter of the permanent magnet 45 to the outer diameter of the thrust shaft part 11 of the fluid dynamic bearing 4 is approximately 2 to 1. Here, the reason that the ratio is approximately ~~1 to 2~~ 2 to 1 is to prevent the rotor 3 from vibrating in the axial direction, and also to reduce the current consumption required to rotate the rotor 3.

Paragraph beginning at line 8 of page 15 has been amended as follows:

That is, if the outer diameter of the permanent magnet 45 is increased, and the volume of the permanent magnet 45 is increased, the amount of magnetic flux entering and leaving the outer peripheral surface ~~a~~ 45a of the permanent magnet 45 increases. As a result, the torque to rotate the rotor 3 increases, and hence it is possible to reduce the current consumption required. However, in the case where the outer diameter of the permanent magnet 45 is increased, the point of action of the torque moves outward in the radial direction. Therefore, the vibration of the rotor 3 increases in proportion to the deviation in the perpendicularity of the rotor 3 to the shaft body 5. Furthermore, conversely, in the

case where the outer diameter of the permanent magnet 45 is reduced, the torque to rotate the rotor 3 decreases, and the current consumption required increases. However, it is possible to reduce the vibration of the rotor 3.

Paragraph beginning at line 23 of page 18 has been amended as follows:

Moreover, the dynamic pressure generating grooves constituting the dynamic pressure generation unit 20 in the axial direction are formed on the front face 11a and the rear face 11b of the thrust shaft part 11. However, this is not limiting, and they may be formed on the rear face a 23a of the counter plate 23 and the axial end face 25a of the small diameter cylinder part 25, facing the front face 11a and the rear face 11b of the thrust shaft part 11 respectively.